

## Catalogue of American Amphibians and Reptiles.

Hartley, L.M., R. Powell, and J.S. Parmelee, Jr. 1998. *Ameiva lineolata*.

*Ameiva lineolata* Duméril and Bibron

*Ameiva lineolata* Duméril and Bibron 1839:119. Type locality, "Saint-Dominigue," restricted by Schwartz (1965) to the Plaine de Cul de Sac in the vicinity of Port-au-Prince, Département de l'Ouest, Haiti. Holotype, Muséum National d'Histoire Naturelle, Paris (MNHN) 2644, collected by "M. le docteur Bally," date of collection unknown (not examined by authors).

*Ameiva lineolata*: Wetherbee 1988:26. *Lapsus*.

• **Content.** Six subspecies are recognized: *lineolata*, *beatensis*, *meracula*, *perplicata*, *privigna*, and *semota*.

• **Definition.** *Ameiva lineolata* is a very small member of the genus *Ameiva* (maximum SVL of males = 59 mm, of females = 54 mm; Schwartz and Henderson 1991). The dorsal caudal scales

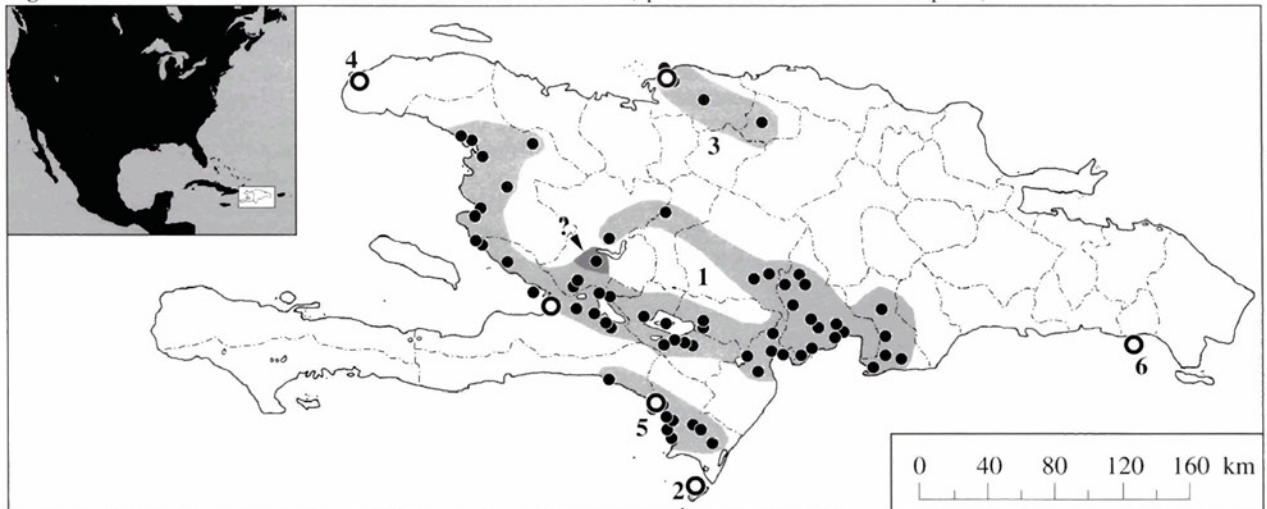
are smooth and oblique, ventrals are in 26–33 longitudinal rows and 8–10 transverse rows (strongly modally 10), subdigital scales number 57–77 (combined counts for both 4th toes), the 15th caudal verticil includes 14–21 scales, and femoral pores number from 23–35 (note that, for all meristic characters, values are composites of all subspecies; Schwartz 1965).

The dorsum is strongly lineate with 9–14 black longitudinal lines separated by cream to buffy longitudinal lines continuing onto the tail proximally. The black longitudinal lines are reduced to 6–9 on the neck just posterior to the auricular opening and to 6–10 on the sacrum. The head pattern has two variations, either a pale diamond-shaped figure on the snout involving the dorsal head scales or a continuation of some pale dorsal head lines to the snout. Hindlimbs are black and white dotted or lined dorsally. Forelimbs have a linear black and white pattern. Hands and feet are blue. The tail is bright blue to greenish-blue. Ventral coloration varies from white to pink to pale blue (Schwartz 1965).

• **Diagnosis.** *Ameiva lineolata* may be distinguished from its Hispaniolan congeners by its small size and the presence of smooth dorsal caudal scales (dorsal caudal scales are keeled in



Figure. Adult male *Ameiva lineolata semota* from Isla Catalina (specimen released at site of capture).



Map. Range of *Ameiva lineolata* (modified from Schwartz and Henderson 1991). Circles mark type localities, that of the nominate subspecies as restricted by Schwartz (1965). Dots indicate other records.

all other Hispaniolan species of *Ameiva*) (Schmidt 1921, Henderson and Schwartz 1984, Henderson et al. 1984).

• **Descriptions.** In addition to the original description by Duméril and Bibron (1839), descriptions in varying degrees of detail may be found in Cope (1862), Barbour and Noble (1915), Mertens (1939a), Cochran (1941), Schwartz (1965), and Schwartz and Henderson (1991). Wever (1978) described the ear.

• **Illustrations.** A black and white photograph of *Ameiva lineolata* appeared in Hassler (1930), and a color photograph was included by Powell et al. (1996a). Cochran (1941) provided line drawings of the top and side of the head, chin, throat, and dorsal granules of *A. l. lineolata* and *A. l. beatensis*, and she also included illustrations of the preanal and femoral regions of *A. l. lineolata*. Drawings of the dorsal patterns of *A. l. lineolata*, *A. l. privigna*, and *A. l. semota* are in Schwartz (1965). Wever (1978) illustrated the middle ear and a sensitivity curve of hearing frequency.

• **Distribution.** A Hispaniolan endemic, this species has a wide, but discontinuous range. On the main island, a single (more or less) continuous distribution extends from St. Marc, Haiti, in the northwest through the Plaine de Cul de Sac–Valle de Neiba to Azua, República Dominicana, toward the southeast. Disjunct populations occur in the northwestern República Dominicana (Valle de Cibao and Isla Cabras), the Península de Barahona south of the Sierra de Batoruco and adjacent areas of Haiti, near Presqu'île du Nord-Ouest, on Isla Beata, and on Isla Catalina. This distribution, to a large degree, reflects the extent of extremely xeric regions, to conditions of which this species appears to be well adapted. The range was illustrated by Cochran (1941), Schwartz (1965), and Schwartz and Henderson (1991).

• **Fossil Record.** None.

• **Pertinent Literature.** Noble and Hassler (1933) noted that the "remarkable resemblance in size and color" between *Ameiva lineolata* and *Mabuya lineolata* had resulted in the confusion of specimens. Cochran (1941) summarized the pertinent literature on *A. lineolata*, described a number of specimens, and discussed the characteristics of recognized subspecies. Mertens (1950) discussed taxonomy and distribution of Hispaniolan *Ameiva*. Schwartz and Klimkowski (1966) made brief comparisons of *A. lineolata* to *A. chrysolaema*. Schwartz (1965) described each subspecies and discussed pertinent literature. Presch (1971, 1974b) examined specimens of *A. lineolata* to characterize tongue structure and dentition of macroteiid lizards. Presch (1974a) included this species in a study of evolutionary relationships among macroteiid lizards. Henderson et al. (1987a, b) noted predation by *Antillophis parvifrons* and *Uromacer oxyrhynchus*. Powell et al. (1989, 1996b) discussed sympatry with other xerophilic Hispaniolan lizards in the Valle de San Juan and aspects of niche partitioning in a lizard community containing *A. lineolata*. Weldon et al. (1993) documented dermatophagy.

The species is included in additional checklists, guides, faunal accounts, and keys by Gray (1845), Duméril (1851), Bocourt (1874), Boulenger (1885), Garman (1887), Barbour (1914, 1930, 1935), Mertens (1938, 1939b, 1940), Böker (1939), Schwartz and Thomas (1975), Schwartz et al. (1978), Schwartz (1979), Schwartz and Henderson (1985, 1988), Wetherbee (1988), and Powell et al. (1996a). Barbour's (1937) checklist inexplicably omitted this species.

• **Nomenclatural History.** Barbour and Noble (1915) mistakenly listed *Ameiva lineolata* in the synonymy of *A. taeniura*

Cope, making the assumption that specimens of the former were merely juveniles of the latter. Schmidt (1921) and Cochran (1941) reestablished *A. lineolata* and *A. taeniura* as distinct species.

• **Remarks.** Powell (1993), applying the evolutionary species concept (*sensu* Wiley 1978 and Frost and Hillis 1990), suggested that *A. l. beatensis*, *A. l. meracula*, *A. l. perplicata*, *A. l. privigna*, and *A. l. semota* may warrant designation as full species.

Frank and Ramus (1995) proposed the common name "dwarf teiid" for this species. Because this name overlooks the generic in lieu of a familial affiliation, many other teiids are small, and the name is neither descriptive of the characteristic pattern of this species or its distribution, we choose not to use it.

• **Etymology.** The name *lineolata* apparently is from the Latin *lineola* (feminine diminutive for "lined"), in obvious reference to the many light longitudinal lines that characterize the dorsal pattern of this species. The name *beatensis* refers to Isla Beata, the island occupied by this subspecies; *meracula* presumably is from the Latin *meracus* (= pure, unmixed), but Schwartz (1965) provided no explanation for the name; *perplicata* is from the Latin *perplexus* (= complex) and alludes to the "entangled" or "involved" situation encountered by Schwartz (1965) when naming the Môle St. Nicholas series; *privigna* is undoubtedly from the Latin *privignus* (= kin), but Schwartz (1965) provided no explanation for the name; and *semota* is from the Latin *semotus* (= distant), presumably in reference to the substantial hiatus between this subspecies and others.

### 1. *Ameiva lineolata lineolata* Duméril and Bibron

*Ameiva lineolata* Duméril and Bibron 1839:119. See species synonymy.

*Ameiva lineolata lineolata*: Mertens 1939a:73. First use of trinomial.

• **Definition.** This subspecies (N = 104) is characterized by: large size (males to 59 mm SVL, females to 54 mm); a modal dorsal pattern of 8 black neck stripes, 10 black trunk stripes, and 8 black sacral stripes; a median dorsal line either entire or broken in the parietal region; a low number of transverse ventrals (8 arranged longitudinally in 29–33 rows), 4th toe subdigital scales (total from both feet 57–74), and femoral pores (total from both sides 23–30); and a high number of scales in the 15th caudal verticil (17–21). Snout coloration is pale buffy with or without indications of black dorsal stripes (Schwartz 1965).

### 2. *Ameiva lineolata beatensis* Noble

*Ameiva beatensis* Noble 1923:2. Type locality, "Beata Island, Dominican Republic." Holotype, American Museum of Natural History (AMNH) 24328, an adult male collected by G.K. Noble on 3 October 1922 (not examined by authors).

*Ameiva lineolata beatensis*: Mertens 1939a:73. First use of present combination.

• **Definition.** This subspecies (N = 15) is characterized by: large size (males to 58 mm SVL, females unknown); a modal dorsal pattern of 7 black neck stripes, 9 black trunk stripes, and 8 black sacral stripes; a black snout and head with pale lines crossing the outer margin of the eyelid on each side continuing anteriorly to the snout; two pale median stripes leading to the upper surface of the head just anterior to the eyes and there joining to form a single stripe extending to near the tip of the snout; a pale blue and black hindlimb pattern; body stripes whitish in color changing to yellow or orange on the head and neck; forelimbs



with three blue and two black lines on the antibrachium; a less distinct preaxial dark line; a light blue to greenish blue tail (pronounced distally); a high number of longitudinal ventrals (30–34), 4th toe subdigital lamellae (68–77), and femoral pores (27–35); and a moderate number of scales on the 15th caudal verticil (16–19) (Schwartz 1965).

### 3. *Ameiva lineolata meracula* Schwartz

*Ameiva lineolata meracula* Schwartz 1965:51. Type locality, "Monte Cristi, Monte Cristi Province, República Dominicana." Holotype, American Museum of Natural History (AMNH) 39486, specimen collected by W.G. Hassler, January 1930 (not examined by authors).

• **Definition.** This subspecies ( $N = 45$ ) is characterized by: small size (males to 55 mm SVL, females to 52); a modal dorsal pattern of 8 black neck stripes, 10 black trunk stripes, and 7 black sacral stripes; a median pale dorsal line almost always broken anteriorly; a pale colored snout with much suffusion of the dark dorsal black pigment into the snout area; a high number of longitudinal ventrals (29–33), 4th toe subdigital scales (59–70), and femoral pores (24–31), and a moderate number of scales in the 15th caudal verticil (16–20) (Schwartz 1965).

### 4. *Ameiva lineolata perplicata* Schwartz

*Ameiva lineolata perplicata* Schwartz 1965:49. Type locality, "Môle St.-Nicholas, Département du Nord-Ouest, Haiti." Holotype, Museum of Comparative Zoology (MCZ) 63344, specimen collected by A.S. Rand and J.D. Lazell, Jr., 24–26 July 1960 (not examined by authors).

• **Definition.** This subspecies ( $N = 11$ ) is characterized by: large size (males to 58 mm SVL, females to 51); a modal dorsal pattern of 8 black neck stripes, 11 black trunk stripes, and 8 black sacral stripes; a median pale dorsal line usually (73%) broken anteriorly; a pale sandy colored snout without indications of black pigment; a high number of longitudinal ventrals (31–33 in 8 transverse rows); a low number of 4th toe subdigital scales (total from both feet 62–69); a moderate number of femoral pores (26–32); and a low number of scales in the 15th caudal verticil (16–19) (Schwartz 1965).

### 5. *Ameiva lineolata privigna* Schwartz

*Ameiva lineolata privigna* Schwartz 1965:55. Type locality, "5 km N Pedernales, Pedernales Province, República Dominicana." Holotype, Museum of Comparative Zoology (MCZ) 77223 (original number V2539), one of two specimens collected 25 June 1964 by D.C. Leber and R. Thomas (not examined by authors).

• **Definition.** This subspecies ( $N = 37$ ) is characterized by: small size (males to 56 mm SVL, females to 52 mm); a modal dorsal pattern of 7 black neck stripes, 9 black trunk stripes, and 7 black sacral stripes; head pattern resembling that of *Ameiva lineolata beatensis*; a pale throat; a low number of longitudinal ventrals (26–32 in 8 transverse rows) and 4th toe subdigital scales (total from both feet 62–76); a moderate number of femoral pores (27–34), and a low number of scales in the 15th caudal verticil (14–18) (Schwartz 1965).

### 6. *Ameiva lineolata semota* Schwartz

*Ameiva lineolata semota* Schwartz 1965:53. Type locality, "Isla Catalina, La Romana Province, República Dominicana." Ho-

lotype, Museum of Comparative Zoology (MCZ) 77222 (original number V551), specimen collected by D.C. Leber, 20 August 1963 (not examined by authors).

• **Definition.** This subspecies ( $N = 3$ ) is characterized by: small size (males to 53 mm SVL, females unknown); a modal dorsal pattern of 8 black neck stripes, 9 black trunk stripes, and 7 black sacral stripes or 8 black stripes; a median pale dorsal line always broken; a tan colored snout with some suffusion of the dark dorsal black pigment into the snout area; a distinctive pattern of the brachium having three pale and two black lines with the preaxial line replaced by blue; a pale blue ventral coloration; a moderate number of longitudinal ventrals (30–32); a high number of 4th toe subdigital lamellae (68–72); a low number of femoral pores (23); and a high number of scales in the 15th caudal verticil (18) (Schwartz 1965).

### Literature Cited

- Barbour, T. 1914. A contribution to the zoögeography of the West Indies, with especial reference to amphibians and reptiles. *Mem. Mus. Comp. Zoöl.* 44:209–359.
- . 1930. A list of Antillean reptiles and amphibians. *Zoologica* (N.Y.) 11:61–116.
- . 1935. A second list of Antillean reptiles and amphibians. *Zoologica* (N.Y.) 19:77–141.
- . 1937. Third list of Antillean reptiles and amphibians. *Bull. Mus. Comp. Zoöl.* 82:77–166.
- and G.K. Noble. 1915. A revision of the lizards of the genus *Ameiva*. *Bull. Mus. Comp. Zoöl.* 59:417–479.
- Bocourt, M.-F. 1874. In A. Duméril, M.-F. Bocourt, and F. Mocquard, 1870–1909. *Études sur les reptiles. In Recherches Zoologiques pour servir à l'Histoire de la Faune de l'Amérique Centrale et du Mexique. Mission Scientifique au Mexique et dans l'Amérique Centrale, Recherches Zoologiques. Part 3, sect. 1. Impr. Imper., Paris.*
- Böcker, H. 1939. Über einige Ergebnisse meiner Forschungen am Deutsch-Dominikanischen Tropenforschungsinstitut. *Publ. Inst. Cient. Domínico-Alemán* 1:14–77.
- Boulenger, G.A. 1885. Catalogue of the Lizards in the British Museum (Natural History). Vol. 2. Trustees Brit. Mus., London.
- Cochran, D.M. 1941. The herpetology of Hispaniola. *Bull. U.S. Natl. Mus.* (177):vii + 398 p.
- Cope, E.D. 1862. Synopsis of the species of *Holcosus* and *Ameiva*, with diagnoses of new West Indian and South American Colubridae. *Proc. Acad. Nat. Sci. Philadelphia* 14:60–82.
- Duméril, A. 1851. In C. Duméril and A. Duméril. Catalogue Méthodique de la Collection des Reptiles. Gide et Baudry, Paris.
- Duméril, A.M.C. and G. Bibron. 1839. *Erpétologie Générale ou Histoire Naturelle Complète des Reptiles*. Vol. 5. Libr. Encycl. Roret, Paris.
- Frank, N. and E. Ramus. 1995. A Complete Guide to Scientific and Common Names of Reptiles and Amphibians of the World. NG Publ., Inc., Pottsville, Pennsylvania.
- Frost, D.R. and D.M. Hillis. 1990. Species in concept and practice: herpetological applications. *Herpetologica* 46:87–104.
- Garman, S. 1887. On the West Indian Teiidae in the Museum of Comparative Zoology. *Bull. Essex Inst.* 19:1–12.
- Gray, J.E. 1845. Catalogue of the Specimens of Lizards in the Collection of the British Museum. Trustees Brit. Mus., London.
- Hassler, W.G. 1930. Digging for lizard nests. *Nat. Hist.* 30:409–420.
- Henderson, R.W., B.I. Crother, T.A. Noeske-Hallin, A. Schwartz,

- and C.R. Dethloff. 1987a. The diet of the Hispaniolan snake *Antillophis parvifrons* (Colubridae). *J. Herpetol.* 21:330–334.
- and A. Schwartz. 1984. A guide to the identification of the amphibians and reptiles of Hispaniola. Milwaukee Pub. Mus. Spec. Publ. Biol. Geol. (4):1–70.
- , —, and S.J. Incháustegui. 1984. Guía para la indentificación de los anfibios y reptiles de la Hispaniola. Mus. Nac. Hist. Nat. Ser. Monogr. (1):1–128.
- , —, and T.A. Noeske-Hallin. 1987b. Food habits of three colubrid tree snakes (genus *Uromacer*) on Hispaniola. *Herpetologica* 43:241–248.
- Mertens, R. 1938. Amphibien und Reptilien aus Santo Domingo, gesammelt von Prof. Dr. H. Böker. *Senckenberg. Biol.* 20: 332–342 + 6 pl.
- . 1939a. Herpetologische Ergebnisse einer Reise nach der Insel Hispaniola, Westindien. *Abh. Senckenberg. Naturfor. Ges.* (449):1–84 + 10 pl.
- . 1939b. Amphibien und Reptilien aus Santo Domingo, gesammelt von Prof. Dr. H. Böker. *Anfibios y reptiles de Santo Domingo, go coleccionados por el Prof. Dr. H. Böker. Publ. Inst. Cient. Domínico-Alemán* 1:82–95.
- . 1940. Zoologische Reisen auf der Insel Hispaniola, p. 155–241. *In* R. Mertens, *Aus dem Tierleben der Tropen. Reisebilder aus Asien, Africa, und America.* Verl. Dr. Waldemar Kramer, Frankfurt a/M.
- . 1950. Zur Taxonomie und Verbreitung der hispaniolischen Eidechsen der Gattung *Ameiva*. *Senckenbergiana* 31:3–7 + 1 pl.
- Noble, G.K. 1923. Four new lizards from Beata Island, Dominican Republic. *Amer. Mus. Nov.* 64:1–5.
- and W.G. Hassler. 1933. Two new species of frogs, five new species and a new race of lizards from the Dominican Republic. *Amer. Mus. Nov.* 652:1–17.
- Powell, R. 1993. Comments on the taxonomic arrangement of some Hispaniolan amphibians and reptiles. *Herpetol. Rev.* 24: 135–137.
- , R.W. Henderson, K. Adler, and H.A. Dundee. 1996a. A checklist of West Indian amphibians and reptiles, p. 51–93. *In* R. Powell and R.W. Henderson (eds.), *Contributions to West Indian Herpetology: A Tribute to Albert Schwartz.* SSAR Contr. Herptol. (12). Ithaca, New York.
- , J.S. Parmelee, Jr., and D.D. Smith. 1996b. Evidence of spatial niche partitioning by a Hispaniolan lizard community in a xeric habitat, p. 317–326. *In* R. Powell and R.W. Henderson (eds.), *Contributions to West Indian Herpetology: A Tribute to Albert Schwartz.* SSAR Contr. Herptol. (12). Ithaca, New York.
- , —, P. Ward, and D.D. Smith. 1989. Geographic distribution: *Anolis w. whitemani*. *Herpetol. Rev.* 20:12.
- Presch, W. 1971. Tongue structure of the teiid lizard genera *Ameiva* and *Cnemidophorus* with a reallocation of *Ameiva vanzoi*. *J. Herpetol.* 5:183–185.
- . 1974a. Evolutionary relationships and biogeography of the macroteiid lizards (Family Teiidae, Subfamily Teiinae). *Bull. S. California Acad. Sci.* 73:23–32.
- . 1974b. A survey of the dentition of the macroteiid lizards (Teiidae: Lacertilia). *Herpetologica* 30:344–349.
- Schmidt, K.P. 1921. Notes on the herpetology of Santo Domingo. *Bull. Amer. Mus. Nat. Hist.* 44:7–20.
- Schwartz, A. 1965. The *Ameiva* (Reptilia: Teiidae) of Hispaniola I. *Ameiva lineolata* Duméril and Bibron. *Carib. J. Sci.* 5:45–57.
- . 1979. The herpetofauna of Ile À Cabrit, Haiti, with the description of two new subspecies. *Herpetologica* 35:248–255.
- and R.W. Henderson. 1985. A Guide to the Identification of the Amphibians and Reptiles of the West Indies Exclusive of Hispaniola. Milwaukee Pub. Mus., Milwaukee, Wisconsin.
- and —. 1988. West Indian amphibians and reptiles: a checklist. Milwaukee Pub. Mus. Contr. Biol. Geol. (74):1–264.
- and —. 1991. Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History. Univ. Florida Press, Gainesville.
- and R.F. Klinikowski. 1966. The *Ameiva* (Lacertilia, Teiidae) of Hispaniola. II Geographic variation in *Ameiva chrysolaema* Cope. *Bull. Mus. Comp. Zool.* 133:425–487.
- and R. Thomas. 1975. A check-list of West Indian amphibians and reptiles. *Carnegie Mus. Nat. Hist. Spec. Publ.* (1):1–216.
- , —, and L.D. Ober. 1978. First supplement to a check-list of West Indian amphibians and reptiles. *Carnegie Mus. Nat. Hist. Spec. Publ.* (5):1–35.
- Weldon, P.J., B.J. Demeter, and R. Rosscoe. 1993. A survey of shed skin-eating (dermatophagy) in amphibians and reptiles. *J. Herpetol.* 27:219–228.
- Wetherbee, D.K. 1988. The Artibonito-Massacre faunal corridor in República Dominicana. *Carib. J. Sci.* 24:23–27.
- Wever, E.G. 1978. *The Reptile Ear: Its Structure and Function.* Princeton Univ. Press, Princeton, New Jersey.
- Wiley, E.O. 1978. The evolutionary species concept reconsidered. *Syst. Zool.* 27:17–26.

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